

WHAT IS CLAIMED:

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1. Biased dual lens eyeglasses, comprising:
first and second nonwire metal orbitals, each orbital having a medial zone and a lateral zone; and
a bridge connected to the medial zone on each orbital;
wherein each orbital is moveable throughout a range of motion of no more than about ± 15 degrees with respect to the bridge.
2. Biased dual lens eyeglasses as in Claim 1, wherein each of said first and second orbitals comprises an annular seat for receiving a lens.
- 10 3. Biased dual lens eyeglasses as in Claim 1, wherein the bridge comprises a metal.
4. Biased dual lens eyeglasses as in Claim 1, wherein the first and second orbitals comprise titanium.
- 15 5. Biased dual lens eyeglasses as in Claim 1, wherein the first and second orbitals comprise aluminum.
6. Biased dual lens eyeglasses as in Claim 4, wherein the first and second orbitals are formed by injection molding.
7. Biased dual lens eyeglasses as in Claim 4, wherein the first and second orbitals are formed by casting.
- 20 8. Biased dual lens eyeglasses as in Claim 1, wherein each orbital is moveable throughout a range of motion of no more than about $\pm 10^\circ$ with respect to the bridge.
9. Biased dual lens eyeglasses as in Claim 1, wherein each orbital is moveable throughout a range of motion of no more than about 5° with respect to the bridge.
- 25 10. Biased dual lens eyeglasses as in Claim 1, further comprising first and second metal earstems pivotably connected to the first and second orbitals, respectively.
11. Biased dual lens eyeglasses as in Claim 1, further comprising first and second lenses, wherein the first orbital completely surrounds the first lens.
- 30 12. Biased dual lens eyeglasses as in Claim 1, further comprising first and second lenses, wherein the first orbital surrounds only a portion of the first lens.
13. Biased dual lens eyeglasses as in Claim 1, wherein the bridge comprises

metal.

14. Biased dual lens eyeglasses as in Claim 13, wherein the metal comprises titanium.

15. Biased dual lens eyeglasses as in Claim 14, wherein the bridge is integrally formed with at least one of the first and second orbitals.

16. Biased dual lens eyeglasses as in Claim 15, wherein the bridge is formed by injection molding.

17. A nonwire biased eyeglass frame, comprising:
a left orbital and a right orbital for supporting a left lens and a right lens, respectively,
each of the left and right orbitals having a first transverse cross sectional area at a first point and a second transverse cross sectional area at a second point;
a bridge connecting the right and left orbitals;
wherein the right and left orbitals are moveable throughout a range of no more than about $\pm 15^\circ$ with respect to the bridge upon application of an external force; and the left and right orbitals are biased to return to a predetermined orientation upon removal of the external force.

18. An eyeglass frame as in Claim 17, wherein each of the right and left orbitals comprises metal.

19. An eyeglass frame as in Claim 18, wherein each of the right and left orbitals is injection molded.

20. An eyeglass frame as in Claim 18, wherein each of the right and left orbitals is cast.

21. An eyeglass frame as in Claim 19, wherein the metal comprises titanium.

22. An eyeglass frame as in Claim 19, wherein the metal comprises aluminum.

23. An eyeglass frame as in Claim 19, wherein the metal comprises copper.

24. An eyeglass frame as in Claim 19, further comprising a left earstem connected to the left orbital and a right earstem connected to the right orbital.

25. An eyeglass frame as in Claim 19, wherein the right and left orbitals are movable throughout a range of no more than about $\pm 10^\circ$ with respect to the bridge upon application of an external force.

26. An eyeglass frame as in Claim 25, wherein the right and left orbitals are

moveable throughout a range of no more than about 5° with respect to the bridge upon application of an external force.

1 ~~27~~. Dimensionally stable, lightweight contoured metal eyeglass frames, comprising:

5 first and second nonwire contoured metal orbitals, for carrying first and second lenses, respectively; and

a bridge connecting the first and second orbitals, the bridge allowing limited movement of the first orbital with respect to the second orbital,

wherein the minimum cross sectional dimension of the first and second orbitals, expressed as an average along any one half inch section of the orbital, is no less than about 0.040 inches.

10 ²~~28~~. Dimensionally stable eyeglasses as in Claim ¹~~27~~, wherein the minimum cross sectional dimension of the first and second orbitals, expressed as an average along any one half inch section of the orbital, is no less than about 0.075 inches.

15 ³~~29~~. Dimensionally stable eyeglasses as in Claim ¹~~27~~, wherein the first and second orbitals are injection molded.

⁴~~30~~. Dimensionally stable eyeglasses as in Claim ³~~29~~, wherein said metal comprises titanium.

20 ⁷~~31~~. Dimensionally stable eyeglasses as in Claim ³~~29~~, wherein said metal comprises aluminum.

⁵~~32~~. Dimensionally stable eyeglasses as in Claim ⁴~~30~~, wherein the transverse cross sectional area through the bridge is at least about 0.015 square inches.

⁶~~33~~. Dimensionally stable eyeglasses as in Claim ⁶~~32~~, wherein the transverse cross sectional area through the bridge is at least about 0.06 square inches.

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